5

- 7. The composition of claim 1, wherein said water is distilled water.
- 8. The composition of claim 1, wherein said food grade acidulent is selected from the group consisting of phosphoric acid, citric acid, malic acid and acetic acid.
- 9. The composition of claim 1, wherein said food grade acidulent is distilled vinegar.
- 10. The composition of claim 1, wherein said source of chlorine dioxide and said food grade acidulent are added to said water, such that a dissolved oxygen content of said composition is less than about 5 ppm.
- 11. The composition of claim 1, wherein said source of chlorine dioxide and said food grade acidulent are added to said water, such that a dissolved oxygen content of said composition is less than about 2 ppm.

12. The composition of claim 1, wherein a dissolved <sup>15</sup> oxygen content of said composition is less than about 1 ppm.

- 13. A method for reducing odors emanating from animal discharges, comprising the steps of applying a dosage of said composition of claim 1 to food rations in an amount effective to reduce odors and feeding said food rations to an animal. 20
- 14. The method of claim 13, wherein said dosage is applied using application means delivering about 0.05 ounces per application  $(0.14 \times 10^{-5} \text{ m}^3 \text{ per application})$ .
- 15. The method of claim 13, wherein said dosage is about one ounce per week  $(2.96 \times 10^{-5} \text{ m}^3 \text{ per week})$ .
- 16. A process for manufacturing a composition for reducing odors emanating from animal discharges, said process consisting essentially of the steps of:
- (a) providing water with a calcium carbonate content less than about 1000 ppm;
- (b) adding chlorine dioxide to said water in an amount effective to reduce odors emanating from animal discharges; and
- (c) adding an acidulent to said water in sufficient quantity to adjust the pH of the composition to a value greater 35 than about 7.
- 17. The process of claim 16, wherein said water has a calcium carbonate content less than about 500 ppm.
- 18. The process of claim 16, wherein said water has a calcium carbonate content less than about 300 ppm.
- 19. The process of claim 16, wherein said food grade acidulent is present in an amount sufficient to adjust the pH of the composition to a value greater than about 9.
- **20**. The process of claim **16**, wherein said food grade acidulent is present in an amount sufficient to adjust the pH 45 of the composition to a value in a range of about 9.2 to 9.4.
- 21. The process of claim 16, wherein said source of chlorine dioxide and said food grade acidulent are added to said water, such that a dissolved oxygen content of said composition is less than about 5 ppm.
- 22. The process of claim 16, wherein said source of chlorine dioxide and said food grade acidulent are added to said water, such that a dissolved oxygen content of said composition is less than about 2 ppm.
- 23. The process of claim 16, wherein said source of 55 chlorine dioxide and said food grade acidulent are added to said water, such that a dissolved oxygen content of said composition is less than about 1 ppm.
- 24. The process of claim 16, wherein said water is de-ionized water filtered by reverse osmosis.
- 25. The process of claim 16, wherein said water is distilled water.
- **26**. The process of claim **16**, wherein said food grade acidulent is selected from the group consisting of phosphoric acid, citric acid, malic acid, and acetic acid.
- 27. The process of claim 16, wherein said food grade acidulent is distilled vinegar.

6

- **28**. A product for reducing odors emanating from animal discharges, comprising: a composition consisting essentially of:
  - (a) water with a calcium carbonate content less than about 1000 ppm;
- (b) chlorine dioxide in an amount effective to reduce odors emanating from animal discharges; and
- (c) an acidulent in sufficient quantity to adjust the pH of the composition to greater than about 7;
- disposed in a container which comprises a material that blocks the transmission of ultra-violet radiation.
- 29. The product of claim 28, wherein said water has a calcium carbonate content less than about 500 ppm.
- 30. The product of claim 28, wherein said water has a calcium carbonate content less than about 300 ppm.
- 31. The product of claim 28, wherein said food grade acidulent is present in an amount sufficient to adjust the pH of the composition to a value greater than about 9.
- 32. The product of claim 28, wherein said food grade acidulent is present in an amount sufficient to adjust the pH of the composition to a value in a range of about 9.2 to 9.4.
- 33. The product of claim 28, wherein said chlorine dioxide and said food grade acidulent are added to said water, such that a dissolved oxygen content of said composition is less than about 5 ppm.
- 34. The product of claim 28, wherein said chlorine dioxide and said food grade acidulent are added to said water, such that a dissolved oxygen content of said composition is less than about 2 ppm.
- 35. The product of claim 28, wherein said chlorine dioxide and said food grade acidulent are added to said water, such that a dissolved oxygen content of said composition is less than about 1 ppm.
- 36. The product of claim 28, further comprising application means for applying measured amounts of said composition to animal food rations.
- 37. The product of claim 36, wherein said application means is a spray applicator.
- 38. The product of claim 37, wherein said spray applicator applies a dosage of about 0.05 ounces per spray  $(0.14 \times 10^{-5} \text{ m}^3 \text{ per spray})$ .
- 39. A method for reducing odors emanating from animal discharges, comprising the steps of applying a dosage of said composition of claim 1 to an animal in an amount effective to reduce odors emanating from animal discharges.
- **40**. The method of claim **39**, wherein said dosage is applied topically.
- 41. The method of claim 39, wherein said dosage is applied by swabbing said composition onto said animal.
- **42**. The method of claim **39**, wherein said dosage is applied to an animal's skin at an opening from which glandular excretions discharge.
- 43. The method of claim 39, wherein said dosage is applied in the genital region of an animal in heat.
- 44. A animal food product for reducing odors emanating from animal discharges, comprising said composition of claim 1 applied to animal food in an amount effective to reduce odors.
- **45**. A product for reducing odors emanating from animal discharges, comprising a topical application including said composition of claim 1 in an amount effective to reduce odors.
- **46**. The product of claim **45**, wherein said topical application is an ointment.
- 47. The product of claim 45, wherein said topical application is a suppository.

\* \* \* \* \*